

YORSGET 2018 – programme

Registration and icebreaker:

Sunday 1st July; 18:00 – 19:30, Café Graal, Rue d'Italie.

Monday 2nd July

Cinema Jean Gabin, Rue des Ecoles, Montgenèvre
Registration and poster set-up: 9:00-9:15

Session 1. Chair: Taija Torvela

9:15 Welcome

9:30 KEYNOTE: **Rebecca Bell**, M. Gray, J. Morgan, S. Henrys, D. Barker, P. Barnes, L. Wallace, D. Saffer, K. Petronotis, the IODP Expedition 375 and Expedition 372 shipboard scientists

Unlocking the secrets of slow slip using next-generation seismic experiments and IODP drilling at the north Hikurangi margin, New Zealand

10:00 **Adriana Georgina Flórez Rodríguez**, K. Ogata

Deformation and fluid flow associated to the Subligurian nappe detachment: insights from the Cinque Terre area (Northern Apennines, Italy)

10:15 **Filippo Carboni**, S. Back, M. R. Barchi

Comparison between two deep-water fold-and-thrust belts: Outer Tuscan Nappe (Northern Apennines, Italy) vs. Baram DWFTB (NW Borneo)

10:30 Discussion

10:45-11:15 Break

Session 2. Chair: Rob Butler

11:15 **Shoufa Lin**

Promontory collision and the early Paleozoic Wuyi-Yunkai orogeny in South China

11:30 **Ezequiel R. Olaizola**, F. Bechis, D. L. Yagupsky, D. M. Bran, S. Oriolo

Geology and structure of the area around Paso de las Nubes, North-Patagonian Andes, Argentina

11:45 **Matteo Simonetti**, R. Carosi, C. Montomoli

Shear deformation in the Southern European Variscan Belt: kinematic of the flow and geochronological constraints

12:00 **Alessandra G. Pellegrino**, B. Zhang, F. Speranza, R. Maniscalco, C. Hernandez-Moreno

Pattern of deformation and vertical-axis rotation in strike-slip fault zone (Yunnan, China)

12:15 **Thierry Dumont**, S. Schwartz, S. Guillot, P. Monié, S. Matthews, M. Jouvent

Kinematics of the early Alpine collision wedge recorded in the Internal zones of the western Alps

12:30 Discussion

12:45-14:00 Lunch and posters

Session 3. Chair: Thierry Dumont

14:00 **Manuel Ignacio de Paz-Álvarez**, J. L. Alonso, L. P. Fernández

Gravity-driven structures and deposits resulting from slope collapse in the margin of a carbonate platform (Pennsylvanian, Cantabrian Zone, NW Iberia)

14:15 **Sian L. Evans**, C. A.-L. Jackson

The Influence of Base Salt Relief on the Structural Evolution of Salt and Overburden: Case Study from the Outer Kwanza Basin, offshore Angola

14:30 **Laura Burrell**, A. Teixell

Exploring the role of salt tectonics in the South-Pyrenean fold-and-thrust belt

14:45 **Camilo Ruiz**, A. Teixell

Role of salt detachment in the fold belt of the axial zone of the Eastern Cordillera, Northern Andes

15:00 Discussion

15:15 Field trip briefing - Alpine setting - Rob Butler

15:45-17:00 Posters with refreshments

Tuesday 3rd July: Field excursion (included) to La Grave and Col du Galibier. Departs 08:15 from Café Graal.

Wednesday 4th July

Session 4. Chair: Rodolfo Carosi

9:30 KEYNOTE: **David Wallis**, L. N. Hansen, T. B. Britton, A. J. Wilkinson

High-angular resolution electron backscatter diffraction analysis of lattice distortion in geological materials.

10:00 **Pratheesh Prabhakaran Nair**, V. Chandrasekharan, P. Vasudevakimal

Microstructural significance of the mylonites from the Achankovil shear zone, South India

10:15 **Diana Avadanii**, L. Hansen, A. Wilkinson, K. Marquardt

Micromechanical investigation of olivine grain boundaries

10:30 Discussion

10:45-11:15 Break

11:15 Briefing and workshop for Chenaillet field excursion. Rob Butler and Taija Torvela

12:45-14:00 Lunch and posters

Session 5. Chair: Thierry Dumont

14:00 **Amicia Lee**, T. **Torvela**, G. L. Lloyd, A. Walker

'Fake mylonites': Melt organisation, strain partitioning, and rapid freezing in the lower crust

14:15 **Chiara Montemagni**, C. Montomoli, S. Iaccarino, R. Carosi, I. M. Villa

Two opposite kinematics shear zones in the Alaknanda – Dhauliganga valleys (NW India): insight from microstructural and geochronological investigations

14:30 **Samuele Papeschi**

Strain localization in quartz-rich rocks at the brittle-ductile transition

14:45 **Stefano Ghignone**, V. Van Schijndel, S. Ferrero, M. Gattiglio, A. Borghi, G. Balestro, I. Gasco

New structural and petrological data for the Susa Shear Zone (mid-Susa Valley, Western Alps): Constraints on a polyphasic shear zone between eclogite and blueschist units

15:15 **Rodolfo Carosi**, C. Montomoli, S. Iaccarino

Constraining the evolution of HT shear zones in the Himalayan mid crust: fusing structural geology and petrochronology

15:30 **Salvatore Iaccarino**, R. Carosi, C. Montomoli, C. Montemagni, H.-J. Massonne, A. K. Jain, I. M. Villa, D. Visonà

The Himalayan metamorphic core along the Alaknanda-Dhauliganga valley (Garhwal Himalaya, India)

15:45 Discussion

16:00 -17:00 Posters with refreshments

Thursday 5th July: Field excursion (included) over Le Chenaillet. Departs 09:20 from Chalmettes chairlift.

Friday 6th July

Session 6. Chair: Rob Butler

9:30 KEYNOTE: **Geoffroy Mohn**, B. Petri, T. Duret, S. M. Schmalholz, O. Müntener

Thinning mechanisms of the continental lithosphere: contribution from the Alpine Tethys rifted margins

10:00 **Fabrizio Cocco**, A. Funedda, E. Patacca

The Campidano Graben (Italy): a Pleistocene re-activation of the Oligo-Miocene fault system of southern Sardinia

10:15 **Samuel C Boone**, A. J. W. Gleadow, B. P. Kohn, C. Seiler, C. K. Morley, D. A. Foster

Rift superposition in the Turkana Depression and the birth of the East African Rift System

10:30 Discussion

10:45-11:15 Break

11:15 Discussion - insights from field excursions - sharing opinions and interpretations

12:45-14:00 Lunch

Session 7. Chair: Rodolfo Carosi

14:00 **Rob Butler**, J.T. Eggenhuisen, P. Haughton, W.D. McCaffrey,

Deformation of sediments during turbidite deposition - a kinematic boundary layer approach

14:15 **Pablo Rodríguez-Salgado**, C. Childs, P. Shannon, J. Walsh

Structural evolution of the Mizzen Basin (Celtic Sea, Offshore Ireland) with special reference to basin inversion

14:30 **Billy Andrews**, Z. Shipton, R. Lord

The internal structure and development of faults cutting coal bearing stratigraphy

14:45 **Gaétan Link**, P. Goncalves, P. Lanari, E. Olliot

Use of garnet and plagioclase as proxies of the evolution of ductile shear zones

15:00 Discussion

15:15-15:45 Break

Session 8. Chair: Taija Torvela

15:45 **Stefan Vollgger**

Photogeology in the 21st century - 3D structural analysis from digital photographs

16:00 **Adam J. Cawood**, C. E. Bond, H. Watkins, M. Cooper, M. J. Warren

Multiple influences on measured fracture attributes in a frontal anticline: a case study from the Sawtooths, NW Montana

16:15 **Dave McCarthy**, T. Dodd

Structural variation across a submarine fold and thrust belt, South Falkland Basin

16:30 **Matias Barrionuevo**, J. Mescua, L. Giambiagi, J. Suriano, H. de la Cal, J. L. Soto, E. Stahlschmidt

Strain and stress field evolution in the Andean orogenic front between 35-36°S and its link with fluid migration

16:45 Discussion and close

19:00 Conference dinner (included)

POSTERS

Displayed through Monday and Wednesday

Billy Andrews, Z. Cumberpatch, Z. Shipton, R. Lord

The importance of stratigraphy and sedimentary structures in fault and fracture development in fluviodeltaic Sequences

Luigi Berio, F. Balsamo, S. Mitterpergher, M. Mozafari, M. Meda, F. Storti

Deformation pattern in the thrust-related Parmelan Anticline (Bornes Massif, Subalpine Chains, Haute-Savoie, France): preliminary results

Rob Butler, T. Torvela

The pegmatite paradox: competing rates of deformation and crystallization

Norbert Caldera, A. Teixell, A. Griera, P. Labaume, X. Coll, N. Mestres

On the tectonic structures of the Eaux-Chaudes massif (western Pyrenees): a Helvetic nappe type in the Pyrenees?

Adam J. Cawood, C. Bond

eRock: on online, open-access repository of virtual outcrops in 3D

Anna Chanou, M. I. de Paz-Álvarez, H. Lebit, R. Carosi

Outcropedia, a public database of all important and beautiful outcrops in the World

Fabrizio Cocco, A. Funedda, C. Butta, S. Naitza

Late Variscan ore deposits in the Baccu Locci shear zone (SE Sardinia): a field example of structurally controlled mineralizations

Alberto Corno, M. Gattiglio, A. Borghi, P. Mosca

Lithostratigraphic, structural and petrographic features of the Monte Banchetta – Punta Rognosa area (Western Alps, Italy)

Sophie Cox; Á. Fagereng; C. MacLeod

Geometry, Deformation Mechanisms and Seismic Style of Oceanic Transform Faults

Manuel Ignacio de Paz-Álvarez, J. L. Alonso, S. Liana-Fúnez

The Esla Nappe (Cantabrian Zone, NW Iberia): preliminary data on its basal shear zone damage and fault rock assemblages

Jordy de Vries

The Pyrenean Variscan Mérens intrusion: mineralogy, timing and strain partitioning within a mylonitised root zone

Sian L. Evans, C. A.-L. Jackson

Intrasalt structure and strain partitioning in layered evaporites: insights from the Messinian salt in the eastern Mediterranean

Lorenzo Gemignani, D. Peacock, M. Jessell, R. Carosi

TecTask "OpenTerminology", a public debate regarding geological terminology for Geoscientists

Tong Hong, S. Lin, C. van Staal, W. Ji

Final closure of the Paleo-Asian Ocean and terminal collision in the Central Asian Orogenic Belt: Constraints from the Beishan Orogenic Collage, Northwest China

Salvatore Iaccarino, R. Carosi, C. Montomoli, M. Simonetti, M. Lezzerini

The hinterland-foreland transition in the Variscan belt of Sardinia (Italy): insights from the Barbagia Thrust

Shelby Johnston

Combined $40\text{Ar}/39\text{Ar}$ and $87\text{Sr}/86\text{Sr}$ analyses of modern muscovites in the Narayani River catchment, Central Nepal

Harold Leah, M. Fondriest, A. Lucca, F. Storti, F. Balsamo, G. di Toro

Coseismic extension recorded within the damage zone of the Vado di Ferruccio Thrust Fault, Central Apennines, Italy

Cyril Lobjoie, P. Trap, E. Oliot, W. Lin, P. Goncalves, D. Marquer

Structural and microstructural study of the ultra-high temperature Khondalite Belt, North China Craton

Flora Feitosa Menezes, C. Lempp

Anisotropy of Volume Change and Permeability in Hard Sandstones under Triaxial Stress Conditions

Geoffroy Mohn, N. Etcheve, D. F. de Lamotte, E. Roca, J. Tugend, J. Gómez-Romeu

Extreme Mesozoic crustal thinning in the Eastern Iberia margin: The example of the Columbrets Basin (Valencia Trough)

Simone Papa, G. Pennacchioni, A. Fioretti, A. Guastoni, A. Langone, L. Secco

The Tertiary pegmatite field of the Central Alps in the southwestern Bergell Pluton: timing of intrusion and implications for the local stress field

Samuele Papeschi

The microstructural record of a 'brittle-ductile transition'

Alessandro Petroccia, M. Simonetti, R. Carosi, C. Montomoli

Kinematics of the flow in the Cavalaire Fault (Maures Massif, SE France): correlation with the transpressional Posada-Asinara shear zone in northern Sardinia

Rabeb Dhifaoui, P. Strzeczynski, R. Mourgues, C. Gourmelen, A. Rigane

Accommodation of a compression continental crust: Analogical modeling of the Tunisian Atlas

Andrea Succo, S. Mitterpergher, M. Mozafari, A. Bistacchi, P.-O. Bruna, F. Storti, M. Meda

Along-strike fold shape and deformation style variability in a multiphase fold evolution: insights from the Pag anticline, External Dinarides, Croatia

Norito Takesue, S. Suzuki

Structural development of the Shimanto Belt, SW Japan—based on analysis of Prelithification shear deformation of melange

David M. Taylor, D. Hodgetts, J. Redfern, J. Richardson

Tectonic Compartmentalisation of Braided Fluvial Systems using Digital Outcrop Models

Taija Torvela, D. Grujic, J. Moreau, G. Hetényi

Re-interpretation of the INDEPTH deep seismic profiles (Himalaya)

Julie Tugend, G. Mohn, G. Manatschal, E. Masini

Influence of rift-inheritance on mountain building processes: a point of view based on the Western Pyrenees and Western Alps

Christopher J. Tulley, Á. Fagereng, K. Ujiie

Slow earthquake phenomena – perspectives from subduction mélange exposed on Kyushu Island, Japan

